

I CLAIM:

1. A method of providing visual caller identification, comprising the steps of:

saving a plurality of directory numbers;

receiving a call, the call being associated with a directory number;

querying a database for caller identification information associated with the call;

sending the caller identification information to a caller identification device;

comparing the directory number associated with the call with the plurality of directory numbers;

if one of the plurality of directory numbers matches the directory number associated with the call, displaying a first visual identification indicator, and displaying the caller identification information associated with the call;

if one of the plurality of directory numbers does not match the directory number associated with the call, displaying a second visual identification indicator, and displaying the caller identification information associated with the call; and

if no caller identification information associated with the call is obtained during the step of querying a database for caller identification information associated with the call, displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available.

2. The method of claim 1, wherein displaying a first visual identification indicator, and displaying the caller identification information associated with the call, further includes:

illuminating a first colored light, and

displaying the caller identification information on a readable display screen of the caller identification device.

3. The method of claim 2, wherein illuminating a first colored light includes, illuminating a green light during displaying the caller identification information.

4. The method of claim 3, wherein illuminating a first colored light includes, flashing a green light during displaying the caller identification information.

5. The method of claim 2, wherein displaying a second visual identification indicator, and displaying the caller identification information associated with the call, further includes:

illuminating a second colored light, and

displaying the caller identification information on a readable display screen of the caller identification device.

6. The method of claim 5, wherein illuminating a second colored light includes, illuminating a yellow light during displaying the caller identification information.

7. The method of claim 6, wherein illuminating a second colored light includes, flashing a yellow light during displaying the caller identification information.

8. The method of claim 5, wherein displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available, further includes:

illuminating a third colored light, and

displaying the message on a readable display screen of the caller identification device.

9. The method of claim 8, wherein illuminating a third colored light includes, illuminating a red light during displaying the message.

10. The method of claim 9, wherein illuminating a third colored light includes, flashing a red light during displaying the message.

11. The method of claim 8, wherein displaying a message that no caller identification information associated with the call is available, further includes:

if caller identification information associated with the call is blocked from display, displaying an indication that the call is a private call; and

if caller identification information associated with the call is not located during querying a database for caller identification information associated with the call, displaying an indication that the call from an unknown calling area.

12. The method of claim 1, wherein displaying a first visual identification indicator, and displaying the caller identification information associated with the call, further includes:

flashing a light according to a first flashing sequence, and

displaying the caller identification information on a readable display screen of the caller identification device.

1314. The method of claim 13, wherein displaying a second visual identification indicator, and displaying the caller identification information associated with the call, further includes:

flashing a light according to a second flashing sequence, and

displaying the caller identification information on a readable display screen of the caller identification device.

14 15. The method of claim 14, wherein displaying a third visual identification indicator, and displaying a message that no caller identification information associated with the call is available, further includes:

flashing a light according to a third flashing sequence, and

displaying the message on a readable display screen of the caller identification device.

19 16. A method of providing visual caller identification in an Advanced Intelligent Network, including a switch, a service control point and a database of caller identification information, wherein the service control point is functionally connected to the switch, and wherein the method comprises the steps of:

receiving a call from a calling party at a calling party switch directed to a called party at a called party switch;

sending call information associated with the call to the service control point, the call information including the directory number of the calling party;

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illuminating a second colored light, and

displaying the caller identification information on a readable display screen of

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illuminating a third colored light, and

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if caller identification information associated with the call is blocked from
y, displaying an indication that the call is a private call; and

if caller identification information associated with the call is not located during a database for caller identification information associated with the call, providing an indication that the call from an unknown calling area.

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a software module operative

to query a database for caller identification information associated with a calling party to a called party, the call being associated with a directory

to send the caller identification information to a caller identification

the caller identification device, operative

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29. A method of providing visual caller identification, comprising the steps of:

saving a plurality of directory numbers;

saving visual projection information for each of the plurality of directory numbers;

receiving a call at a caller identification device;

querying a database for caller identification information associated with the call;

sending the caller identification information to a caller identification device;

comparing the directory number associated with the call with the plurality of directory numbers;

if one of the plurality of directory numbers matches the directory number associated with the call, projecting the saved projection information associated with the directory number onto a projection surface; and

if one of the plurality of directory numbers does not match the directory number associated with the call, projecting caller identification information associated with the call onto a projection surface.